The Island Effect in Postverbal Constructions in Japanese

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Abstract

It has been generally assumed that a violation of island constraints indicates that the relevant syntactic phenomena involves movement. That is, if what look like displacements violate island constraints but remain acceptable, this means that they should not be derived by movement. A of examination postverbal careful constructions in Japanese reveals that no movement is involved in the derivation of the construction despite the fact that in some cases island effects are observed. The effects, which have up to now been dealt with purely in syntax, can receive a better account in terms of language processing. This suggests that the human parser should undertake explanations of part of the output of the competence system.

1 Introduction

Japanese is descriptively a verb-final language. In some cases, however, non-verbal elements come at the end of sentences, as shown in (1).^{1,2}

- (1) a. *Taro-ga ano mise de tabe-ta yo*, Taro-NOM that shop at eat-PAST FP *susi-o*. sushi-ACC
 'Taro ate sushi at that shop.'
 - b. *Taro-ga susi-o tabe-ta yo*, Taro-NOM sushi-ACC eat-PAST FP, *ano mise de*. that shop at

In (1a), the object *susi-o* 'sushi-ACC' appears in postverbal position, and in (1b), the adverbial phrase *ano mise de* 'at that shop' does so. I refer to these phenomena as the postverbal construction in Japanese (JPVC), and refer to

elements in sentence-final position as postverbal elements (PVE).³

Some researchers (e.g., Endo, 1989; Kaiser, 1999; Whitman, 2000; Tanaka, 2001; and Abe, 2004) claim that the PVE is derived by movement because of the obedience of the PVE to island constraints such as the so-called Complex NP Constraint (CNPC), as shown in (2). In (2), e is used to mark the position associated with the moved element, namely the PVE, and the identical subscript indicates that the PVE corresponds to e.

(2) *?[NP [CP [ei Sonkeisiteiru] sensei]-ga respect teacher-NOM fueteimasu yo, gakuseitati-gai. increase FP students-NOM
'The number of the teachers who theyi respect is increasing, studentsi.'

In (2), the PVE is extracted out of the NP that contains the relative clause, thereby violating the CNPC. The example in (3), however, is acceptable although it violates the CNPC.

(3) [NP [CP ei Sonkeisiteiru] gakuseitati]-ga respect students -NOM fueteimasu yo, Tanaka sensei-oi. increase FP Tanaka teacher-ACC
'The number of the students who respect himi is increasing, Mr. Tanakai.'

It has been generally assumed that a violation of island constraints indicates that the relevant syntactic phenomena involves movement. That is, if what look like displacements violate island constraints but are still acceptable, this means that they should not be derived by movement.

¹ The relevant elements are in boldface.

² The abbreviations used in glossing the data are as follows: ACC = accusative, DAT = dative, FP = sentence-final particle, NEG = negative, NOM = nominative, TOP = topic.

³ I do not deal with the case in which clauses appear in postverbal position, as shown below.

 ⁽i) Watashi-wa sitteiru yo, Taro-ga susi-o tabe-ta I -TOP know FP Taro-Nom sushi-ACC eat-PAST koto-o.

that-ACC

^{&#}x27;I know that Taro ate sushi.'

The example in (3) is hence problematic for movement approaches. I therefore propose the statement given in (4) concerning the derivation of the JPVC:

(4) The PVE is adjoined to a CP via External Merge.

The purpose of this paper is to argue, through analysis of the island effect in the JPVC, that the human parser should undertake explanations of part of the output of the competence system.⁴ The outline of this paper is as follows. In section 2, I propose/adopt a licensing condition and interpretive rules for adjoined phrases, as well as two parsing strategies. In sections 3 and 4, I demonstrate that the presence or absence of the island effect observed in the JPVC can be accounted for in terms of the interaction of the licensing condition with the parsing strategies. Finally, in section 5, I deal with the case in which adjuncts appear in postverbal position.

2 Hypotheses⁵

I propose the licensing condition for adjoined elements in (5).

(5) The licensing condition for adjoined phrases (where X= any syntactic category):

A phrase α adjoined to XP is licensed only if α is associated with β such that

- (i) α c-commands β , ⁶ and
- (ii) α is non-distinct from β in terms of Case features.

In light of the condition in (5), I propose interpretive rules concerning adjoined phrases as shown informally in (6):

- (6) Interpretive rules about adjoined phrasesSuppose that α is adjoined to XP (where X= any syntactic category), then
- (i) α is construed as an argument sharing properties with β , ⁷ only if

- a. α is an NP or a CP, and
- b. α is non-distinct from β in terms of referentiality, ⁸ and
- c. β is in A(rgument)-position (i.e., subject and object).
- (ii) α is construed as a potential modifier of β only if α is not construed as an argument.

With respect to parsing strategies, I first follow Pritchett (1992) in adopting the *Generalized Theta Attachment* formulated in (7):

 (7) Generalized Theta Attachment: Every principle of the Syntax attempts to be maximally satisfied at every point during processing. (Pritchett, 1992: 138)

Although the name of (7) contains *theta attachment*, Pritchett notes that this heuristic should be understood in the sense that the parser attempts to maximally satisfy all syntactic principles. Furthermore, I propose a condition applicable to reinterpretations in (8):

(8) Unconscious Reinterpretation Condition (UREC)
It is impossible for the human parser to associate a syntactic object X with α, if there is β such that α is similar to β and β is closer to X than α is.

"Similar" and "closer" are defined in (9) and (10), respectively:

(9) α is similar to β iff

- a. α, β, and X are non-distinct in terms of categorial features (i.e., syntactic categories) and Case features (e.g., nominative, accusative), or
- b. both α and β are potential modifiees of X.⁹
- (10) Suppose that X c-commands α and β . Then, β is closer to X than α is iff
 - a. β contains α , or
 - b. β c-commands α unless every phase (i.e., ν P, CP) containing α contains β ,¹⁰ or

⁴ See also Ackema and Neeleman (2002).

⁵ In Kamada (2009), I demonstrate that the licensing condition in (5) is applicable to English Rightward Movement constructions (ERMC) as well and account for island effects in ERMCs in terms of language processing.

⁶ *C-command* is defined as (i) based on *contain* as defined in (ii) (see Chomsky, 2001: 116):

⁽i) X c-commands Y if X is a sister of K that contains Y, where K may or may not be Y, (ii) K contains Y if K immediately contains Y or immediately contains L that contains Y.

 $^{^7\,\}alpha$ and β share properties including theta-roles and semantic features unless semantic conflicts occur.

 $^{^{8}\}alpha$ is non-distinct from β as long as they do not refer to different persons, things, or events. Hence, α can be construed as an argument even if it is non-referential (see footnote 15).

⁹ The problem of giving a precise formulation of *potential modifiees* will be left to future research.

¹⁰ The conditional clause in (10b) makes it difficult to unify the three relations in terms of a path between a PVE and the

c. otherwise (i.e., if β neither contains nor ccommands α), a path between β and X is shorter than the one between α and X.

To put it in another way, the UREC states that attempts can be made to associate X with α without conscious efforts (i.e., in a low-cost manner) until an appropriate interpretation is given to X unless there are competing elements such as β .

To show how the assumptions proposed above apply, I analyze the JPVC in (11).^{11, 12}

(11) *Taro-ga e_i tabe-ta yo, susi_i-o* Taro-NOM eat-PAST FP, sushi-ACC 'Taro ate *it*_i, sushi_i.'

When encountering *Taro-ga* 'Taro-NOM,' the parser classifies it as a nominative Case marked NP to which no theta-role is assigned. ¹³ According to (7), to maximally satisfy syntactic principles (e.g., the theta-criterion), *Taro-ga* is kept in storage (i.e., left unattached to anything) until a theta-role assigner (i.e., a predicate) is encountered; otherwise, the theta criterion would not be locally satisfied.¹⁴

When encountering the verb *tabe-ta* 'ate,' the parser identifies it as a verb that has two thetaroles. To maximally satisfy syntactic principles, the parser postulates a gap as a null argument (i.e., object) while at the same time integrating *Taro-ga* as an argument so that *Taro-ga* can receive a theta-role from the verb. ^{15, 16} The

 (i) Taro-wa e nage-ta yo, saji-o Taro-TOP throw-PAST FP spoon-ACC 'Taro gave up.' [Lit. 'Taro threw a spoon.'] postulated null object is also assigned a theta-role such as an overt counterpart. Then, *yo* 'COMP' is encountered, and C and TP are merged.¹⁷ The parser thus contains a structure like (12).



When *susi-o* 'sushi-ACC' is encountered, it is identified as an NP that has no theta-role assigned. However, it is impossible to make a structural reanalysis such that the PVE can receive a theta-role. Otherwise, word order would be rearranged. Thus, the NP is adjoined to a root CP, and the licensing condition in (5) subsequently attempts to apply in order to assure that the PVE can be licensed. The final parse tree is given in (13).

The idiom chunk *saji* cannot be the antecedent of an overt pronoun *sore* 'it,' as shown below:

 (ii) *Taro-wa saji-o nage-ta kedo Hanako wa Taro-TOP spoon-ACC throw-PAST but Hanako-TOP sore-o nage-nakat-ta. it-ACC throw-NEG-PAST
 'Taro gave up but Hanako did not give up.'

Example (i) would hence be unacceptable in the idiomatic reading if the null argument e were *pro*. The idiomatic interpretation, however, is available in (i). Accordingly, *pro* in (i) is inappropriate (pace Tanaka, 2001; Soshi & Hagiwara, 2004). Here, I assume that e is an underspecified null argument in the sense that it has no inherently specified features such as [+pronominal].

It may be worth mentioning, in passing, that as one of the reviewers claims, the displacement of idiom chunks of the sort in (i) is usually evidence for movement because idioms are often assumed to be treated as non-compositional. However, I follow Nunberg, Sag and Wasow (1994) in arguing that idioms should be treated as compositional, i.e., an idiomatic meaning is composed from idiomatic interpretations of the parts of an idiom. For a detailed discussion, see Kamada (2009, chapter 4).

 17 The parse tree in (12) is the same as that of a normal sentence which ends with the final particle, as shown in (i).

(i) $\begin{bmatrix} CP & Tero-ga & VP & tabe-ta \end{bmatrix} \end{bmatrix} yo \\ Taro-NOM & eat-PAST & FP \end{bmatrix}$

relevant element. I will later give evidence for the necessity of this condition (see (24)).

¹¹ It is assumed that in Japanese, nominative Case checking should be done in the specifier of vP without movement to the specifier of TP (see Fukui, 1995; Kuroda, 1992). That is, a subject does not move to the specifier position of TP unless T has an EPP feature (cf. Miyagawa, 2001).

¹² Here, I assume that T (=Tense) must be amalgamated with V at the Interfaces.
¹³ For convenience, I take only the theta-theory into

¹³ For convenience, I take only the theta-theory into consideration.

¹⁴ In accordance with a head-driven parsing strategy, T in Japanese should not appear in the parse tree until a predicate is encountered.

¹⁵ The theta-theoretic principle: External Merge in thetaposition is required of (and restricted to) arguments.

Adapted from Chomsky (2000: 103) ¹⁶ It is not appropriate to assume that null arguments are *pro*. One of the reasons is that non-referential NPs such as idiom chunks can appear in postverbal position:



In (13), *susi-o* c-commands *e* and it is nondistinct from *e* in terms of Case features. The PVE can hence be associated with *e*, and thus it is licensed, because in (13), there is no element corresponding to β in (8). Furthermore, according to the interpretive rules in (6), the PVE may be construed as if it is an argument of the verb *tabe-ta* 'ate' because it is non-distinct from *e* in terms of referentiality.¹⁸

3. The Island Effect¹⁹

In light of the UREC in (8), it is now possible to consider the island effect observed in the JPVC. For convenience, I will describe island effects according to the structural relation between α , the potential associate and β , a potential intervener, in (8) which is divided into three types in (10).

¹⁸ There is no way in my proposed analysis to exclude examples such as (i):

(i) *e_i Kokoni ki-ta yo, Taroi-o. here came FP Taro-ACC 'Taro came here.'
Cf. e_i Kokoni ki-ta yo, Taroi-ga. here came FP Taro-NOM

In (i), the verb *kita* 'came' is an intransitive verb and an accusative Case marked NP *Taro-o* ''Taro-ACC'' appears in postverbal position. The licensing condition would allow *Taro-o* to be associated with a null argument *e* in subject position because they are non-distinct in terms of Case features, and *Taro-o* would thus be licensed. Then, following the interpretive rules, *Taro* would share properties with the null argument, and hence the example would have the reading that *Taro came*. This, however, is contrary to fact. This problem seems to come from the assumption that the Case features of null arguments should be uninterpretable. If Case features in Japanese were interpretable whether or not they are morphologically realized, this problem would be dissolved. This possibility should be explored in future research.

¹⁹ For more details and many more examples, see Kamada (2009).

That is, Type I: β contains α ; Type II: β ccommands α ; and Type III: β neither contains nor c-commands α .

3.1 Type I: β containing α

I will begin with the type shown in (10a). Let us consider the example in (14) where a phrase containing a null argument is non-distinct, in the sense of (9a), from the PVE which is expected to be associated with the null argument.²⁰

(14) *?[NP [CP [ei sonkeisiteiru] sensei]-ga respect teacher-NOM fueteimasu yo, gakuseitati-gai. (=(2)) increase FP students-NOM
'The number of the teachers who theyi respect is increasing, studentsi.'

In (14), the matrix subject is the complex NP $[_{NP} [_{CP} [e \text{ sonkeisiteiru}] \text{ sensei}]$ -ga, which has nominative Case as well as contains a null The nominative Case marked argument. postverbal NP gakuseitati-ga 'students-NOM' ccommands the null argument and they are nondistinct with respect to Case features (see (5)). According to the UREC in (8), however, the complex NP has priority over the null argument for association with the PVE, because the complex NP contains the null argument and they are non-distinct in terms of categorial features and Case features. That is, the parser cannot associate the PVE with the null argument. Example (14a) is thus unacceptable.

3.2 Type II: β c-commanding α

I will now turn to the case of (10b) in which the association of a PVE with a null subject inside a complex NP is blocked by an element c-commanding the null subject.²¹

(15) [&][NP[CP e_i Tanaka sensei-o sonkeisiteiru Tanaka teacher-ACC respect toiu] uwasa]-o sitteiru yo, Taro_i-ga. COMP rumor-ACC (I) know FP Taro-NOM
'(I) know the rumor that he_i respects Mr. Tanaka, Taro_i.'

In (15), when the verb *sonkeisiteiru* 'respect' is encountered, a null subject is postulated, and

²⁰ *? indicates relatively unacceptable examples.

²¹ & indicates that a PVE is associated with a wrong element, resulting in a different interpretation from what is intended.

subsequently the null subject and Tanaka senseio 'Mr. Tanaka-ACC' have theta-roles assigned, respectively. On reaching toiu 'COMP', the parser reanalyzes the main clause as an embedded clause, and hence keeps it in storage until a thetarole assigner appears. When uwasa-o 'rumor-ACC' is encountered, it is merged to the embedded clause, creating a complex NP. The complex NP does not have a theta-role, and therefore it is kept in storage. As soon as the parser encounters the matrix verb sitteiru 'know,' it postulates a null argument as a matrix subject. Then, the null matrix subject and the stored complex NP are integrated and theta-roles are assigned. Afterwards, the final particle yo is merged with the matrix TP, and the postverbal NP is adjoined to the root CP. The final parse tree is informally represented in (16).



In (16), the null subject $e (=\beta)$ in the main clause c-commands the null subject $e (=\alpha)$ in the embedded clause. They are non-distinct in terms of Case features. Thus, the matrix subject has priority over the embedded counterpart for association with the PVE. Therefore, (15) would have the reading that *Taro knows the rumor that someone respects Mr. Tanaka*, which is different from what is expected.

3.3 Type III: β neither containing nor ccommanding α

Let us then consider the type shown in (10c) (i.e., the case where β neither contains nor ccommands α). Observe (17), where the PVE has an accusative Case, the matrix subject is a complex NP containing a null object, and the matrix object appears in the initial position of a sentence by undergoing the operation of scrambling.

(17) ^{&} Minna-o [NP[CP Taro-ga e_i sonkeisiteiru
Everyone-ACC Tar -NOM respect
toiu] uwasa]-ga odorokaseta yo,
Comp rumor -NOM surprised FP
Tanaka sensei_i-o .
Tanaka teacher-ACC
'The rumor that Taro respects <i>him_i</i>
surprised everyone, Mr. Tanakai.'

In (17), when the embedded verb *sonkeisiteiru* 'respect' is encountered, the parser incorrectly analyzes *minna-o* 'everyone-ACC' and *Taro-ga* 'Taro-NOM' as arguments of the embedded clause verb. The parse tree at this point thus contains no null arguments. *Minna-o* should also be construed as a scrambled element.

On reaching *toiu* 'COMP,' the parser amends the main clause analysis such that the clause can be assigned a theta-role, and thereby the clause is kept in storage until a theta-role assigner appears.

When encountered, the theta-role assigner *uwasa-ga* 'rumor-NOM' is merged to the stored clause, and assigns the clause a theta-role. Thus, the complex NP is created. However, the complex NP has no theta-role at this stage, and hence it is stored.

When reaching a matrix verb, the parser postulates a null object as an argument of the matrix verb, and subsequently integrates both the null object and the complex NP to the matrix verb, so that both of them can be assigned thetaroles.

As soon as the postverbal NP is attached to a root CP, the licensing condition attempts to apply in order to guarantee that the postverbal NP is licensed. The parse tree at this point is illustrated in (18). There, the PVE *Tanaka sensei-o* 'Mr. Tanaka-ACC' fails to be associated with the embedded object t_1 (= α), which is incorrectly analyzed as the trace of the scrambled object *minna-o* 'everyone-ACC.' Furthermore, the null object *e* (= β) of the matrix verb is closer to the PVE than any other element non-distinct from it.

The matrix object hence takes precedence over such elements for association with the PVE. The alternative analysis would reattach *minna-o* to the matrix TP as a scrambled element. This reanalysis, however, is costly. The PVE in the above example is hence difficult to associate with the null object within the complex NP.



I will turn to another example in which an incorrect syntactic-analysis leads to the wrong association. Consider the sentence in (19).²²

(19) *? Hanako-ga [NP[CP Taro-ga e_i Hanako-NOM Taro-NOM sonkeisiteiru toiu] uwasa]-o respect COMP rumor- ACC sitteiru yo, Tanaka sensei_i-o. know FP Tanaka teacher-ACC 'Hanako knows the rumor that Taro respects him_i Mr. Tanaka_i.' In (19), *Hanako-ga* 'Hanako-NOM' is incorrectly analyzed as an element in the embedded clause. In other words, *Hanako-ga* is construed as an argument of *sonkeisiteiru* 'respect.' Thus, there are no appropriate elements with which the PVE can be associated. That is, the PVE is difficult to associate with the null object in the embedded clause.

4. The Absence of the Island Effect

In this section, I will discuss acceptable examples where PVEs can be associated with null arguments that are contained embedded clauses such as complement clauses and relative clauses. These examples are grouped into three types as listed below:

- Type A: Phrases containing null arguments are different from PVEs with respect to categorial features.
- Type B: Phrases containing null arguments are different from PVEs with respect to Case features.
- Type C: Phrases containing null arguments are different from PVEs with respect to both categorial features and Case features.

These three types will be presented in turn.

4.1 Type A: Different Categorial Features

I will first consider Type A: phrases containing null arguments that are different from PVEs with respect to categorial features.

In (20), a nominative Case marked NP *Taro-ga* 'Taro-NOM' appears in postverbal position. It is different in terms of categorial features from the clause [$_{CP}$ *Tanaka sensei-o sonkeisiteiru koto*]*-ga* '[that *e* respect Mr. Tanaka]-NOM,' which contains a null argument. That is, the clause is not similar to the null argument in the sense of (9). Thus, the clause does not prevent the PVE from being associated with the null argument, and hence (20) is acceptable.

²² The example in (i) is unacceptable, probably because the complex NP containing a null argument has the same type of Case as the PVE:

⁽i) *? Hanako-wa [NP[CP Taro-ga ei sonkeisiteiru toiu] Hanako-TOP Taro-NOM respect COMP uwasa]-o sitteiru yo, Tanaka sensei-o rumor-Acc know FP Tanaka teacher-ACC
'Hanako knows the rumor that Taro respects himi, Mr. Tanakai.'

^{(20) [}CP ei Tanaka sensei-o sonkeisiteiru Tanaka teacher-ACC respect koto]-ga hontoo dat-ta yo, Taroi-ga. COMP -NOM true was FP Taroi-NOM 'That hei respect Mr. Tanaka was true, Taroi.'

4.2 Type B: Different Case Features

Next, I will consider Type B: phrases containing null arguments that are different from PVEs with respect to Case features.

Let us look at the examples in (21).

(21) [NP [CP ei Sonkeisiteiru] gakuseitati]-ga respect students -NOM fueteimasu yo, Tanaka sensei-oi. (=(3)) increase FP Tanaka teacher-ACC
'The number of the students who respect himi is increasing, Mr. Tanaka.'

In (21), an accusative Case marked NP *Tanaka* sensei-o 'Mr. Tanaka-ACC' appears in postverbal position. It is different in terms of Case features from the complex NP [NP [CP Sonkeisiteiru] gakuseitati]-ga '[the students who respect e]-NOM' which contains a null argument. In other words, the complex NP is not similar to the null argument in the sense of (9). Thus, the complex NP does not block the PVE from being associated with the null argument, and hence (21) is acceptable.²³

4.3 Type C: Different Categorial and Case Features

Now let us turn to Type C. Observe the example in (22).

(22) [CP Taro-ga e_i sonkeisiteiru koto]-ga Taro-NOM respect Comp -NOM hontoo dat-ta yo, Tanaka sensei_i-o true was FP Tanaka teacher-ACC
'That Taro respects him_i was true, Mr. Tanaka_i.'

In (22), an accusative Case marked NP *Tanaka sensei-o* 'Mr. Tanaka-ACC' appears in postverbal position. The PVE is different from the clause

[*Taro-ga sonkeisiteiru koto*]-*ga* '[Taro respects e]-NOM' which contains a null argument with respect to not only categorial features but also Case features. Hence, the clause is not similar to the null argument in the sense of (9), resulting in failure to block the association of the PVE with the null argument. Thus, (22) is acceptable.

5. Postverbal Adjuncts

In this section, I will deal with the case where adjuncts appear in postverbal position. Let us consider the example in (23) that displays island effects.

In (23), after encountering the postverbal PP, the parser realizes that there are no following elements, and it then starts to associate the PVE with a modifiee. The matrix verb *mita* 'saw' can be modified by the locative PP, and it also contains the complex NP that includes the other verb *atta* 'met with;' hence, the matrix verb is chosen as a modifiee over the embedded one. In other words, the postverbal locative PP is difficult to associate with the verb *at-ta* 'met with' within the relative clause.

Finally, I discuss the case where evidence is given for the necessity of the conditional clause in (10b). Let us consider the example in (24) where, although a subject asymmetrically c-commands an object, the former has no priority over the latter for association (see footnote 10):

(24) *Kyooju-ga kuruma-o kat-ta yo*, Professor-NOM car -ACC bought FP, *yuumei-na* well-known 'A professor bought a car, well-known.'

Example (24) has two readings: the postverbal adjective *yuumei-na* 'well-known' may modify *kyooju-ga* 'professor-NOM' or *kuruma-o* 'car-ACC'. This ambiguity can be derived from the UREC in (8). That is, the subject does not block

²³ The example in (i) is less acceptable than that in (21) although the postverbal phrase is different from the complex NP that contains a null argument in terms of Case features:

⁽i) *? John-ga [NP[CPMary-ga ei age-ta] hon]-o nusunda John-NOM Mary-NOM gave book-ACC stole yo, Billi-ni. FP Bill-DAT
'John stole a book that Mary gave to himi, to Billi.'

The reason that (i) is unacceptable may be that an NP marked with a dative particle *ni* is likely to be analyzed as a locative PP, and that *Bill-ni* 'Bill-DAT' is interpreted as a potential modifier of the matrix predicate.

^{(23) &}lt;sup>&</sup>[Shushou-ga kinoo at-ta Prime minister-Nom yesterday met with josei]-o mitanda yo, Shinbashino-no woman-Acc saw FP Shinbashi -Gen ryoutei-de. Japanese-style restaurant at '(I) saw the woman whom [the prime minister met with at a Japanese-style restaurant in Shinbashi yesterday].' (Soshi and Hagiwara (2004: 423))

the association between the object and the PVE because the subject is contained in every phase (i.e., vP) that contains the object (note that *kyooju-ga* occupies the specifier position of vP). Hence, *yuumei-na* may be associated with both arguments without conscious efforts. This account is further supported by the following unambiguous example in (25).

(25) Kurumai-o kyooju-ga ti kat-ta yo, car- ACC Professor-Nom bought FP, yuumei-na well-known
'A cari, a professor bought ti, well-known.'

In (25), the object *kuruma-o* 'car-ACC' is moved to the specifier position of TP by scrambling. The scrambled NP c-commands *kyooju-ga* 'professor-NOM,' and is not contained in every phase that contains *kyooju-ga*. Hence, *kuruma-o* has priority over *kyooju-ga* for association with the PVE *yuumei-na*, resulting in the absence of ambiguity.

6. Conclusion

In this paper, I first proposed that the PVE is adjoined to a CP via External Merge given the assumption that the derivation of the JPVC involves no movement. Then, I demonstrated that the presence or absence of the island effect observed in the JPVC can be accounted for in terms of the interaction of the licensing condition strategies with the parsing I have proposed/adopted here. This analysis suggested that the human parser should undertake explanations of part of the output of the competence system.

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References

- Abe, Jun. 2004. On Directionality of Movement: A Case of Japanese Right Dislocation. *Proceedings of the 58th Conference, The Tohoku English Lieteracy Society*: 54-61.
- Ackema, Peter and Ad Neeleman. 2002. Effects of Short-Term Storage in Processing Rightward

Movement. In Sieb Nooteboom, Fred Weerman and Frank Wijnen (eds.), *Storage and Computation in the Language Faculty (Studies in Theoretical Psycholinguistics)*. Dordrecht: Kluwer. pp. 219-256.

- Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. In Martin, Roger, David Michaels and Juan Uriagereka (eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik.* Cambridge, Mass.: MIT Press. pp. 89-155.
- Chomsky, Noam. 2001. Derivation by Phase. In Michael Kenstowicz, (ed.), *Ken Hale: A life in language*. Cambridge, Mass: MIT Press. pp. 1-52.
- Endo, Simon, Mutsuko. 1989. An analysis of the postposing construction in Japanese, PhD Thesis, the University of Michigan.
- Fukui, Naoki. 1995. *Theory of Projection in Syntax*. California: CSLI.
- Kaiser, Lizanne. 1999. Representing the Structure-Discourse Iconicity of the Japanese Post-Verbal Construction. In Darnell, Michael, Edith Moravcsik, Frederic Newmeyer, Michael Noonan, and Kathleen Wheatley (eds.), *Functionalism and Formalism in Linguistics, Volume II: Case Studies.* Amsterdam: John Benjamins Publishing Company. pp. 107-129.
- Kamada, Kohji. 2009. *Rightward Movement Phenomena in Human Language*, PhD Thesis, the University of Edinburgh.
- Kuroda, Shigeyuki. 1992. Japanese Syntax and Semantics, Collected Papers. Dordrecht: Kluwer Academic Publishers.
- Miyagawa, Shigeru. 2001. The EPP, Scrambling, and Wh-in-Situ. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*. Cambridge, Mass: MIT Press. pp. 293-338.
- Nunberg, Geoffrey, Ivan A. Sag and Thomas Wasow. 1994. Idioms. *Language*, 70(3): 491-538.
- Pritchett, Bradley. 1992. *Grammatical Competence and Parsing Performance*, Chicago: University of Chicago Press.
- Soshi, Takahiro and Hiroko Hagiwara. 2004. Asymmetry in Linguistic Dependency: Linguistic and Psychophysiological Studies of Japanese Right Dislocation. *English Linguistics*, 21(2): 409-453.
- Tanaka, Hidekazu. 2001. Right-Dislocation as scrambling. *Journal of Linguistics*, 37: 551-579.
- Whitman, John. 2000. Right Dislocation in English and Japanese. In Ken-ichi Takami, Akio Kamio and John Whitman (eds.), *Syntactic and Functional Explorations in Honor of Susumu Kuno*. Tokyo: Kurosio Publishers. pp. 445-470.